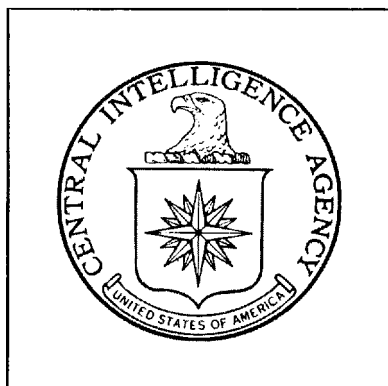


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DIRECTORATE OF
INTELLIGENCE

Imagery Analysis Report

Naval Base and Shipyard 402

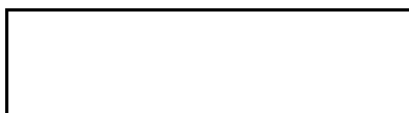
Severodvinsk, USSR

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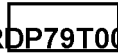
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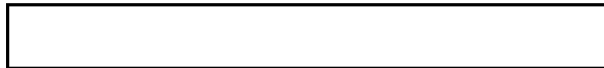
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May 1968

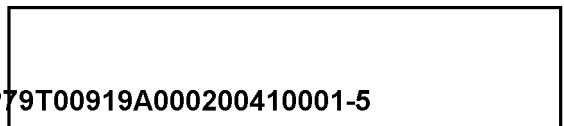
NAVAL BASE AND SHIPYARD 402

SEVERODVINSK, USSR



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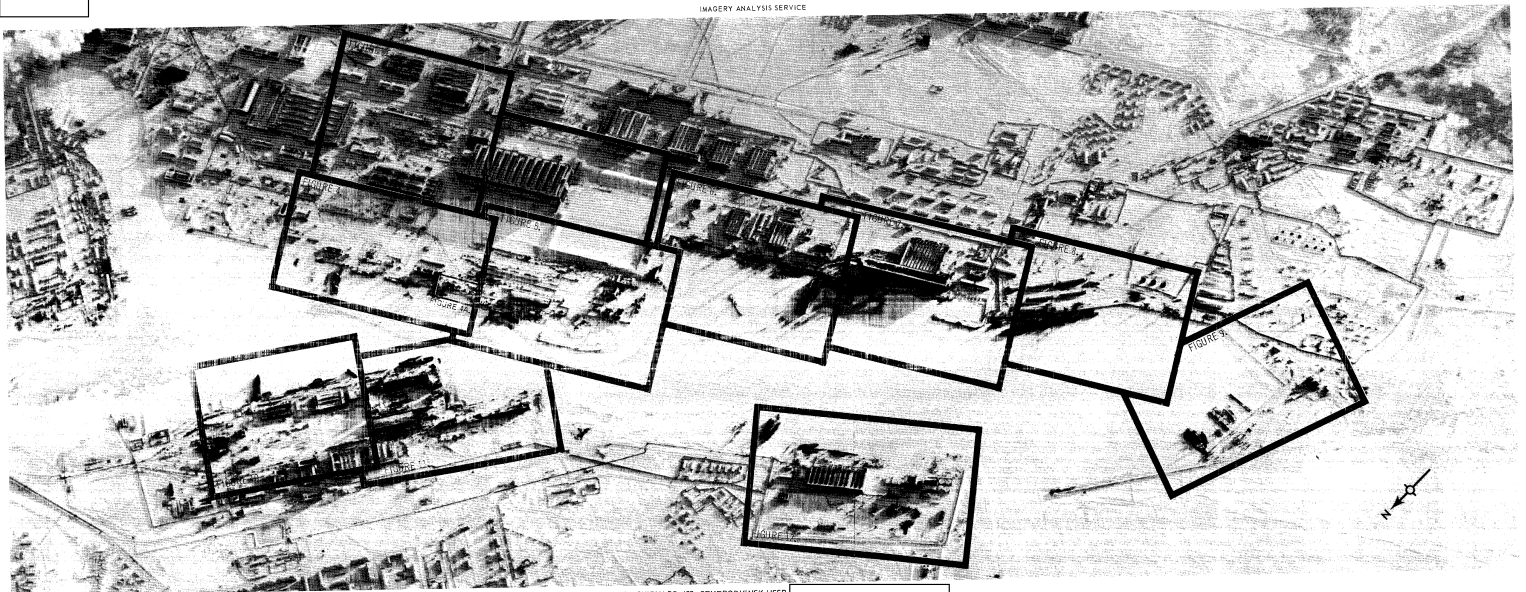


FIGURE 1. SHIPYARD 402, SEVERODVINSK, USSR

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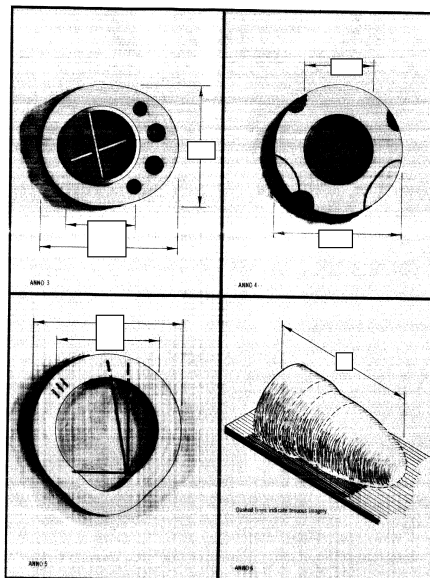


FIGURE 2A. SUBMARINE HULL SECTIONS, SEVERODVINSK SHIPYARD 402. ARTIST'S CONCEPTS FROM
ANNOTATIONS AND NUMBERS KEYED TO FIGURE 2 OF THIS REPORT.

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SHIPYARD : NAVAL BASE AND SHIPYARD 402
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

KEY TO NUMBERED ANNOTATIONS ON FIGURE 2

1. Unidentified Cylindrical Object (diameter approximately [redacted] feet; inner diameter roughly [redacted] feet; inner diameter roughly [redacted] feet; inner diameter roughly [redacted] feet). This object is positioned on its upright (transverse) axis and is located on a flatbed on the railroad spur leading into the south-east corner of the submarine hull section sub-assembly building. The small diameter of this section, the lack of visible taper, and the larger size diameters of nearly all of the other sections recently sighted in this area of the yard indicate that this object could be a component other than a section of submarine pressure hull.
2. Possible frame for submarine hull (outer diameter approximately [redacted] feet; inner diameter roughly [redacted] feet).
3. Frame for Submarine Hull. The larger outer axis of this frame measures approximately [redacted] feet. The smaller outer axis measures approximately [redacted] feet. The diameter of the inner circular pressure hull opening is approximately [redacted] feet. Within the widest portion of the frame rim (approximately [redacted] in width) four large lightening holes are visible. This is the first sighting of a frame having this configuration at Severodvinsk.
4. Frame for Submarine Hull (outer diameter approximately [redacted] feet; inner diameter approximately [redacted] feet; inner span approximately [redacted] feet).
5. Frame for Submarine Hull (maximum outer span approximately [redacted] feet; inner span approximately [redacted] feet).
6. Submarine Hull Section on Transverser Carriage (Length of section approximately [redacted] feet). This section is comprised of a transition piece (the end furthest from the Main Construction Hall) and a smaller diameter tapered section which mates to it. The general appearance and orientation of this section leads to the belief that it comprises a pressure hull area just forward of the aftermost stern section. Shadow precludes any diameter dimensions.

* Artist's impression of this component will be found on Figure 2A.

NOTE: All track/position numbers and buildings and key designations used in this report are keyed to DDC/AS-83016.

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KEY TO FACILITY ANNOTATIONS ON FIGURE 2

A. New Building Under Construction
The basic dimensions of the building outlined by the skeletal up-
right frame supports are approximately [] feet.

B. New Building in Final Stages of Construction
Basic dimensions are approximately 225 by 100 feet. See Annotation



FIGURE 2. REAR OF MAIN CONSTRUCTION HALL, SHIPYARD 402, SEVERODVINSK, USSR.
25X1 25X1

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SHIPYARD : NAVAL BASE AND SHIPYARD 402
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

KEY TO NUMBERED ANNOTATIONS ON FIGURE 3

1. Snow-Cleared Slot for Sliding Door to South Bay of Main Construction Hall
Note that the corresponding slot for the north bay remains uncleared. Based upon the undisturbed snow pattern visible between the tracks in front of the Main Construction Hall and the entrance to the launch basin it is believed that this activity is in preparation for taking a vessel out from the south side of the Main Construction Hall. See Annotation 2 below.

25X1 [redacted] ILLEGIB
The track has been recently cleared of snow for a distance of approximately 500 feet from the construction hall door. The last sighting of a submarine on this track was in [redacted] See Annotation

25X1 3. Keel Block Arrangement for Very Large Floating Crane
This is the first sighting of keel blocks for the very large floating crane at this location in the launch basin. The floating crane has been observed previously only in connection with submarine activity in this launch basin. The relationship of the crane keel block arrangement to the launchway tracks appears indicative of a lift operation at the submarine's extremity rather than an amidships lift as previously indicated by the crane placement observed in [redacted]

25X1 KEY TO FACILITY ANNOTATION ON FIGURE 3

A. Main Construction Hall
The melting snow pattern visible on the roof of the Main Construction Hall is less advanced over the northeastern quarter of the building indicating that less heat is present in this section of the building. Although wind and a very slight peak in the roof could account for some irregularities in the snow melting pattern, the noticeable contrast between snow cover and bare roof along the line running down the centerline of the long axis of the building appears more indicative of a temperature difference within the building.

25X1 The same phenomenon was even more pronounced in [redacted]

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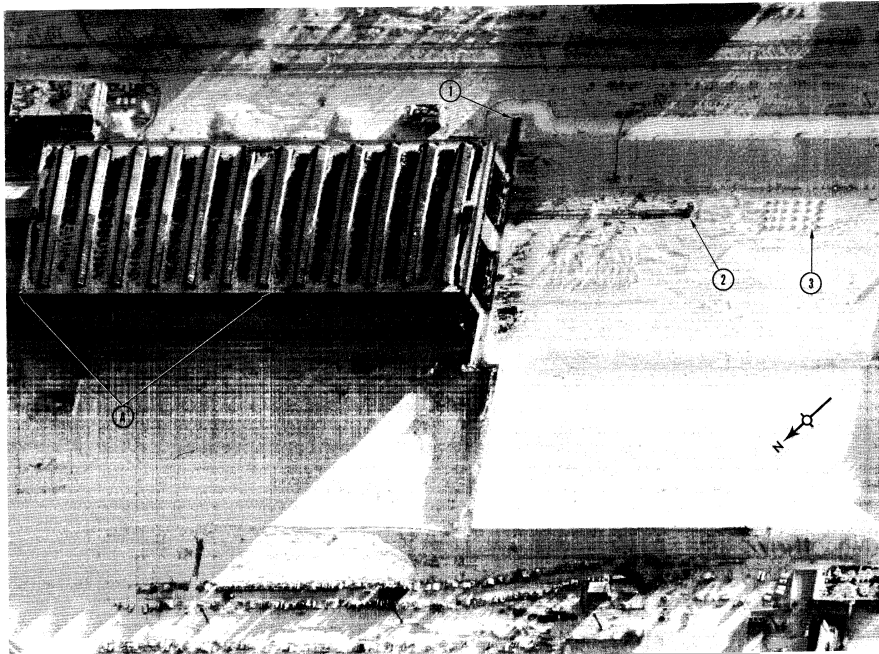


FIGURE 3. MAIN CONSTRUCTION HALL AND LAUNCH BASIN, SHIPYARD 402, SEVERODVINSK, USSR.

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SHIPYARD : NAVAL BASE AND SHIPYARD #02
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

KEY TO ANNOTATIONS ON FIGURE 4

1. Probable Material Handling Barge (LOA approximately 195 feet)
This is the same wide, flat-decked, superstructure-free barge as that sighted along the East Quay by the hull sections in [redacted]. See [redacted]. At least two unidentified objects are located on the deck amidships. The object furthest aft is approximately 40 feet in length and 25 feet wide. Although this coverage is only monoscopic the tonal change across the top of this object indicates that it is concave; therefore, the overall impression gained is that of looking down at a partial cylinder.
2. Ostseamar Vessel
The inner frames are in the retracted mode. This vessel was observed parallel to the East Quay in [redacted]. See Annotation 5, Figure [redacted].
3. Probable Tender for "A" Class SSN
[redacted]
4. Unidentified AG (LOA approximately 215 feet)
This ship was berthed in the identical position in [redacted] (Annotation 1, [redacted] however, since [redacted] this ship has been sighted at Berthing Space No. 2 along the Main Quay [redacted] DDI/IAR-53444).
5. Floating Dib Crane
This crane was last observed (but not reported) in this same position in [redacted] it had been at the western end of the East Quay just outboard of the area used to store submarine hull sections. [redacted]
6. Three Floating Vertical Screens
[redacted]
7. Tugboat (visible LOA approximately 110 feet)
[redacted]

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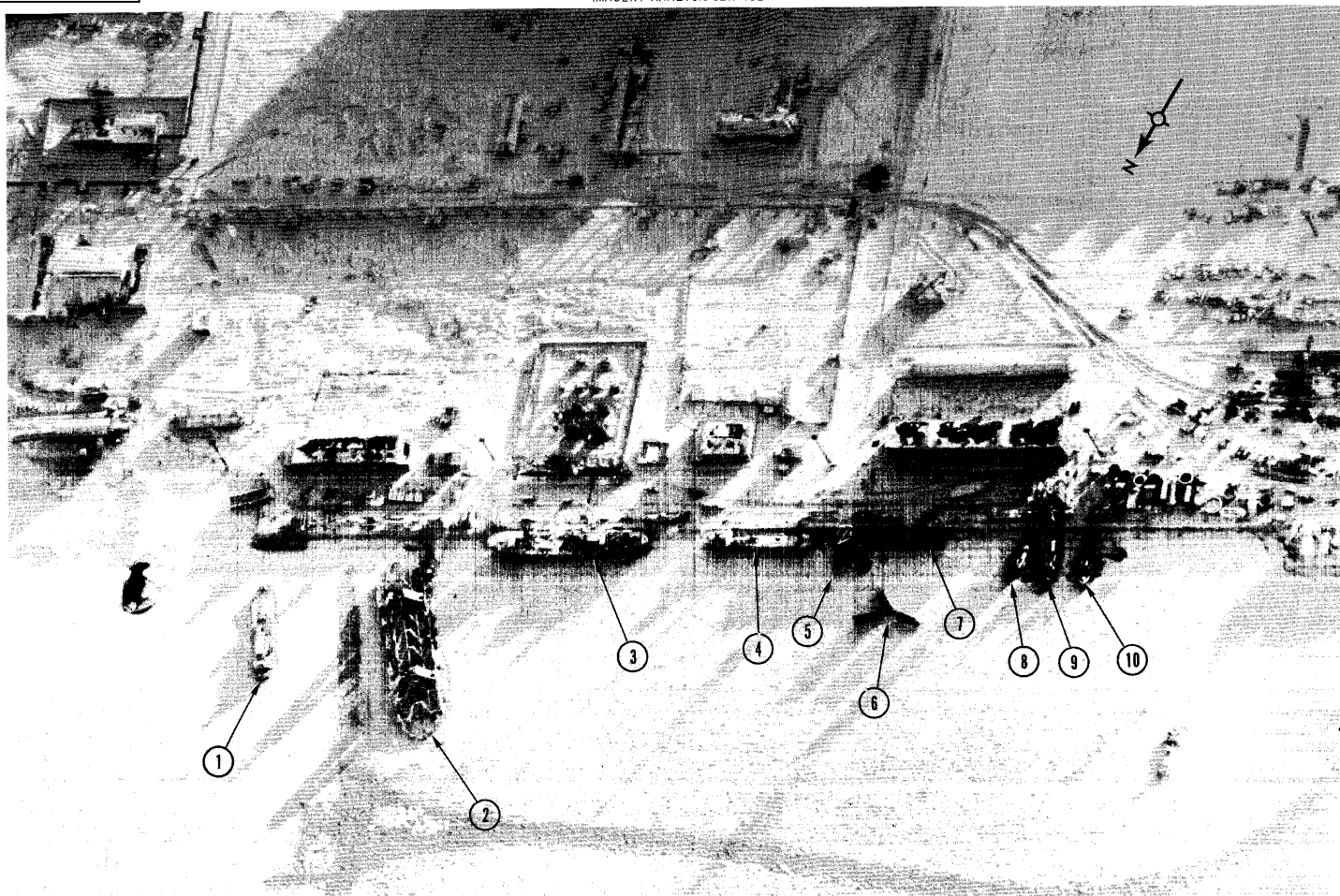


FIGURE 4. EAST QUAY, SHIPYARD 402, SEVERODVINSK, USSR.

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25X1

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KEY TO HULL SECTIONS ON EAST QUAY (ANNOTATIONS ON FIGURE 4A)

- | | | |
|-----|--|------|
| 1. | Upright Hull Section (outer diameter [redacted]) | 25X1 |
| | [redacted] 25X1 | |
| 2. | Upright Hull Section (outer diameter [redacted]) | 25X1 |
| | [redacted] 25X1 | |
| 3. | Upright Hull Section (maximum diameter 25 feet; inner diameter [redacted] feet) | |
| | [redacted] 25X1 | |
| 4. | Possible Upright Section (could not be measured) | 25X1 |
| | [redacted] 25X1 | |
| 5. | Upright Hull Section (outer diameter [redacted] inner diameter 20 feet) | 25X1 |
| | [redacted] 25X1 | |
| 6. | Upright Hull Section (outer diameter [redacted]) | 25X1 |
| | This section does not equate to any section observed on the quay in [redacted] | 25X1 |
| | [redacted] 25X1 | |
| 7. | Hull Section on Longitudinal Axis (maximum diameter [redacted] length 15 feet) | |
| | This is believed to be the same section as that sighted in this position in [redacted] lighting conditions are better on this coverage (with respect to this object) in delineating the side nearest the quay; this accounts for the larger diameter now obtained. See Anno- | 25X1 |
| | [redacted] 25X1 | 25X1 |
| 8. | Probable Hull Section on Longitudinal Axis (length [redacted] diameter could not be determined) | 25X1 |
| | [redacted] 25X1 | |
| 9. | Large Submarine Hull Section on Longitudinal Axis (hull diameter [redacted]) | 25X1 |
| | [redacted] four black concentric bands, probably supports for outer frames, are spaced [redacted] apart along the curved outer hull surface. They do not have any measurable height. [redacted] | 25X1 |
| | [redacted] | 25X1 |
| 10. | Probable Large Upright Hull Section (diameter [redacted]) | 25X1 |
| | This is not the same section as that observed in this same position [redacted] | 25X1 |
| | [redacted] 25X1 | |
| 11. | Upright Hull Section (diameter [redacted]) | 25X1 |
| | No section occupied this position on the quay in [redacted] | |

25X1

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25X1

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25X1

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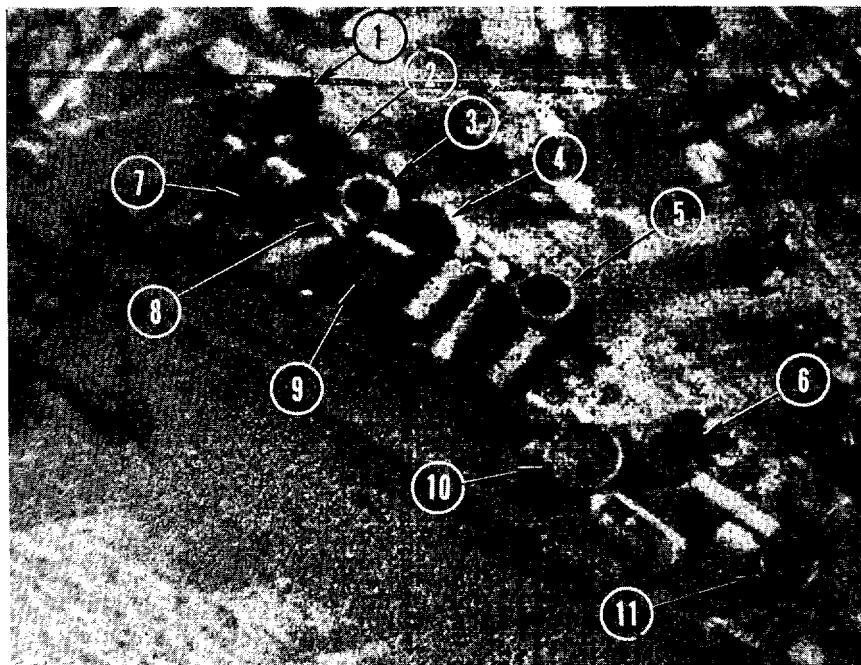


FIGURE 4A. HULL SECTION ON EAST QUAY

NOTES: (1) All measurements given for Figure 4A are approximate.

- (2) All references to similar hull sections observed in identical positions on [] are keyed to the annotation numbers of Figure 3, CIA/PIR-77008, Submarine Hull Section, Severodvinsk Naval Base and Shipyard 402, Severodvinsk,

25X1

25X1

25X1

25X1

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25X1

IMAGERY ANALYSIS SERVICE

SHIPYARD : NAVAL BASE AND SHIPYARD 402
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

25X1

KEY TO NUMBERED ANNOTATIONS ON FIGURE 5

1. Probable OKHTENSKIY Class ATR (apparent LOA approximately 150 feet)
2. Unidentified Probable AG
[REDACTED]
3. Unidentified Auxiliary (LOA approximately 250 feet)
In [REDACTED] this ship was on blocks on the unflooded shallow side of the Main Launch Basin. [REDACTED]

25X1

25X1

25X1

KEY TO FACILITY ANNOTATION ON FIGURE 5

- A. Pilings for New Structure Under Construction
These pilings have been erected since [REDACTED]

25X1

25X1

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25X1

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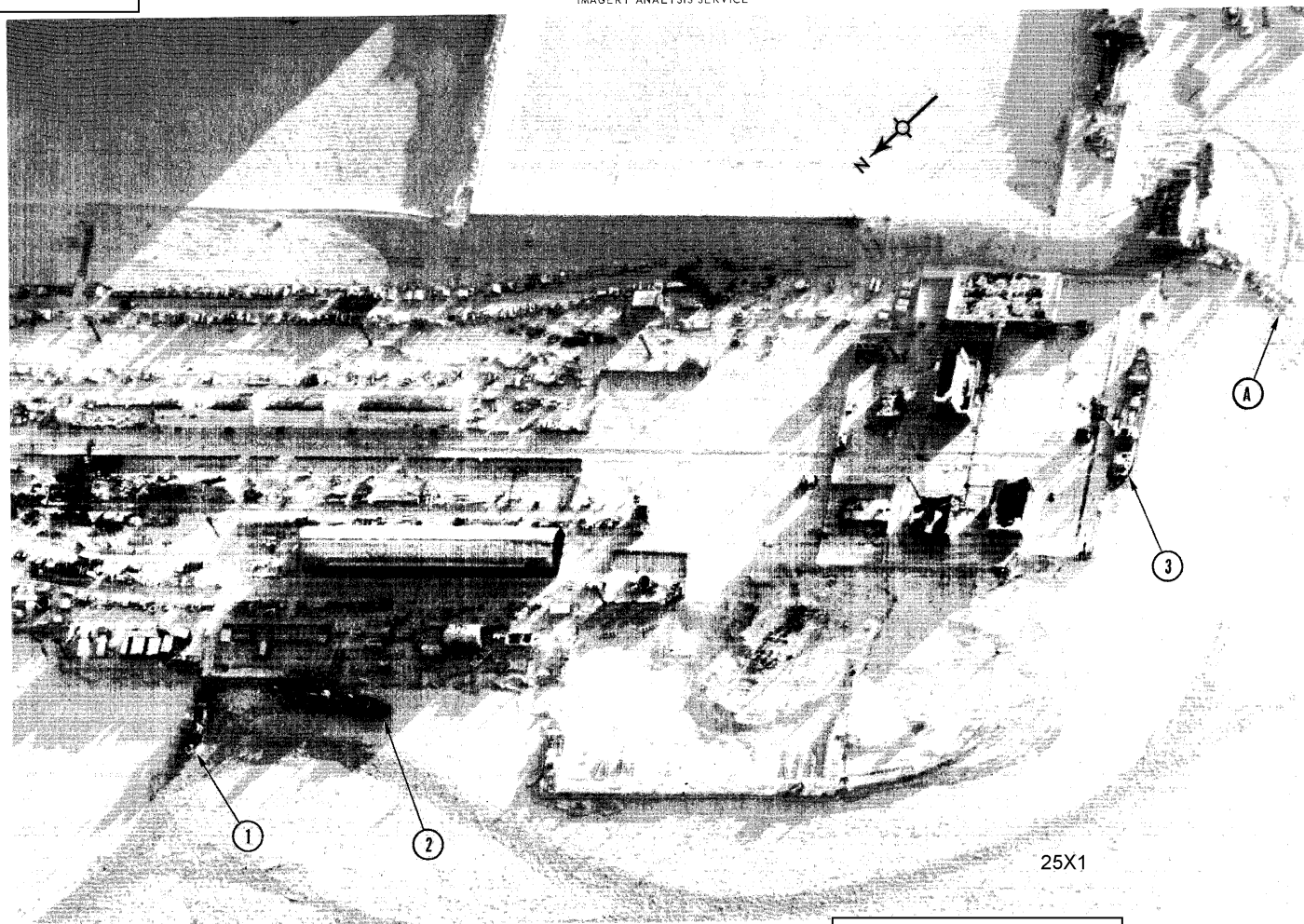


FIGURE 5. EAST QUAY AND LAUNCH BASIN QUAY, SHIPYARD 402, SEVERODVINSK, USSR,

25X1

25X1

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IMAGERY ANALYSIS SERVICE

SHIPYARD : NAVAL BASE AND SHIPYARD 402
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

KEY TO ANNOTATIONS ON FIGURE 6

1. Possible ADG (LOA approximately)
25X1
2. Rectangular Work Barge
This barge was last observed in the middle of the estuary at one end of the catamaran vessel.
3. Unidentified Probable AG (LOA approximately 305 feet)
When last sighted on this ship was in the West Basin area. It had left the shipyard, possibly in company with an "E-II" Class SSGN previously noted alongside the West Basin (missile loading) Quay. It is noted that its present position along the Main Quay in Berthing Space No. 1 is the same berthing space where an "E-II" missile loading operation was observed in . See Annotation 21, Figure 7 and and Anno-
25X1 25X1
4. Unidentified Yard Craft
5. Small Barge (LOA approximately)
6. "E-II" Class SSGN (visible waterline length approximately 385 feet)
This submarine is berthed outboard of a rectangular submarine support barge and is positioned bow toward the perpendicularly-moored floating dock. Floating screens are located outboard of the Numbers 1, 3, and 4 missile launchers.
25X1

The "E-II" Class SSGN which occupied this berthing space between
was not present on
Unidentified activity was observed in this position (Berthing Space No. 3)
as early as CIA/PIR-67311). The
launching/outfitting pattern observed to date at Severodvinsk suggests
that "E-II's" are launched in late fall - early winter and become
operational by the early fall roughly 9-12 months after launch. The
evidence in indicates, that the last "E-II" of the late
output was launched prior to (Anno-
25X1 25X1 25X1

This submarine could equate to one of three possibilities: (1)
continued outfitting of a submarine launched in
(2) an operational submarine back for refitting or (3) a recently
launched new construction submarine. Based upon the foregoing it
25X1

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25X1

25X1

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appears that the first possibility (continued outfitting) is the least likely in view of the long outfitting time that would be involved. Of the latter two possibilities (refit or new construction) neither at this time can be considered more likely than the other. It can be stated that the "E-II" construction rate has dropped markedly, if not completely, when compared with earlier [] observations. However, up to now we have not had enough evidence to identify an "E-II" refit at the Main Quay.

25X1

25X1

7. Small rectangular support barge (LOA approximately 95 feet)

[]

25X1

8. Six Probably Cylindrical Objects
The length of two of the three objects nearest the crane base is approximately []. The lengths of the three objects furthest from the crane base are approximately the same but shadows obscure their end-points. The widths/diameters of these objects are roughly [] each. These objects were not present on the quay in []

25X1

25X1

9. New Class Ballistic Missile Submarine (visible waterline length approximately 410 feet)
Heavy shadows and lack of stereo coverage limit interpretation of top-side detail. No suggestion of ballistic missile tubes is visible on this coverage of the submarine. The most significant new detail visible is the presence of a sail-mounted diving plane. A faintly visible circular image, roughly 15 feet in diameter, is located roughly 55 feet from the apparent after edge of the sail. It cannot be determined from this photography if this imagery is a permanent fixture within the submarine. The outer deck plating of this submarine has been stripped away for a distance of at least 20 feet beginning at a point roughly 115 feet aft of the after edge of the sail. The darkness of this depression suggests that it may extend through the pressure hull of the submarine.

25X1

25X1

10. Rectangular Submarine Support Barge (LOA approximately 190 feet)

[]

25X1

11. Rectangular Submarine Support Barge (LOA approximately 190 feet)

[]

The new submarine and the two 190-foot barges straddling it remain in the identical position as they were when last observed in []

25X1

12. Unidentified Craft (LOA approximately 80-85 feet)

Eight small objects, each no greater in size than [] in width/diameter, are positioned in two rows of four on the amidships deck of this craft.

25X1

25X1

13. Large Missile Target Barge (YAGT)

[]

25X1

25X1

25X1

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25X1

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25X1

14. "N" Class SSN in Floating Dock

The submarine's length-overall measures approximately 360 feet. The submarine appears to be cut through to the pressure hull by an opening approximately 25 feet long beginning approximately [] from the bow. No sail can be discerned on the submarine on this monoscopic coverage. The bow-mounted diving planes are extended. The submarine's position within the dock is identical to that of its last observation

25X1

25X1

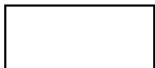
15. Rectangular Submarine Support Barge

25X1

25X1

25X1

25X1



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25X1

25X1



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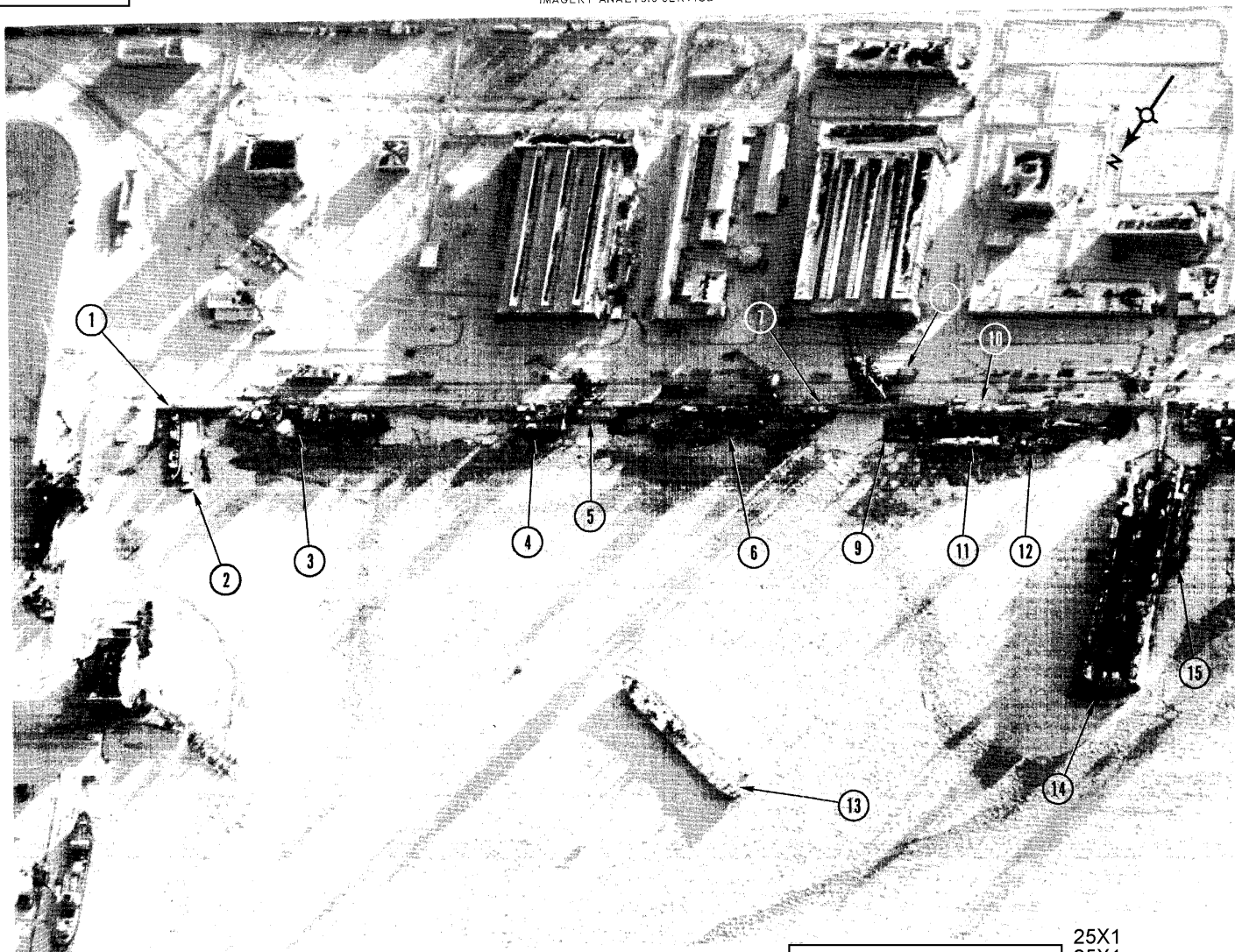
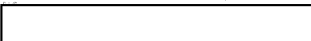


FIGURE 6. OUTFITTING QUAY, MAIN YARD, SHIPYARD 402, SEVERODVINSK, USSR,



25X1

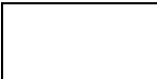
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IMAGERY ANALYSIS SERVICE

SHIPYARD : NAVAL BASE AND SHIPYARD 402
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

25X1

25X1 25X1

25X1

KEY TO NUMBERED ANNOTATIONS ON FIGURE 7

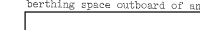
1. Unique Auxiliary (visible length approximately 215 feet)
25X1
2. Rectangular Submarine Support Barge (LOA approximately 190 feet)
25X1 25X1
3. Open Cylindrical Frame or Section (outer diameter [redacted] feet; inner diameter approximately [redacted] height undetermined) 25X1
This section was not present at this location in [redacted] A 25X1
slightly larger covered circular object having a diameter of approx- 25X1
imately [redacted] and located roughly 21 feet further west of this 25X1
spot in [redacted] however, it is not visible on the quay on 25X1
[redacted] 25X1
4. Possible Frame for Submarine Hull (outer diameter approximately [redacted] feet; inner diameter approximately [redacted]) 25X1
5. "PM-124" Class YRSN (visible length approximately 280 feet)
The bow of this ship is obscured by the jib of the large floating crane.
6. Probable "TOPLIVO-2" Class YO (LOA approximately [redacted]) 25X1
Superstructure placement aft, a long centerline catwalk, and length-
overall contribute to this identification.
7. Very Large Floating Crane
[redacted] 25X1
8. Unidentified Small Yard Craft
9. Floating Dock Containing a Probable "N" Class SSN
The stern fin of the submarine can readily be discerned toward the west
end of the dock in the identical position as the stern of an "N" Class
observed in this dock in [redacted] A rectangular structure sur- 25X1
rounds the bow indicating that work on the bow sonar may be in progress.
The distance from the stern fin to the edge of the structure on the
bow is roughly 360 feet. The sail of this submarine has been removed
since [redacted] and the area abaft the location of the sail appears
to be torn up. [redacted] 25X1
25X1 25X1

TOP SECRET

25X1



25X1



25X1

25X1

10. Unidentified Barge Berthed across Open End of Floating Dock (LOA approximately 90 feet)
This craft most closely resembles a 90-foot barge observed at this berthing space outboard of an "M" Class SSN in [redacted] See Anno-
- KEY TO FACILITY ANNOTATIONS ON FIGURE 7
- A. Construction Hall Number 2
The snow melting pattern visible on the roof of this construction hall indicates that the entire two-bay shed is heated. This activity indicator is far more pronounced in [redacted] when only the eastern end of one bay was noticeably clear of snow. Interim winter coverage showed the major buildings either all snow-covered or all snow-free, thereby precluding an assessment of relative interior activity levels. On the [redacted] coverage (Figure 1 of this report) the only major buildings devoid of significant snow cover are a large portion of the two construction halls and the main building at the Igarka Island Nuclear Submarine Special Support Facility.
- B. Quay Under Construction
This easternmost end of the West Basin Quay had been undeveloped until the present. The new quay extension, now in mid-construction, measures approximately 350 feet in length and will link the West Basin Quay with the Side Launch Basin.

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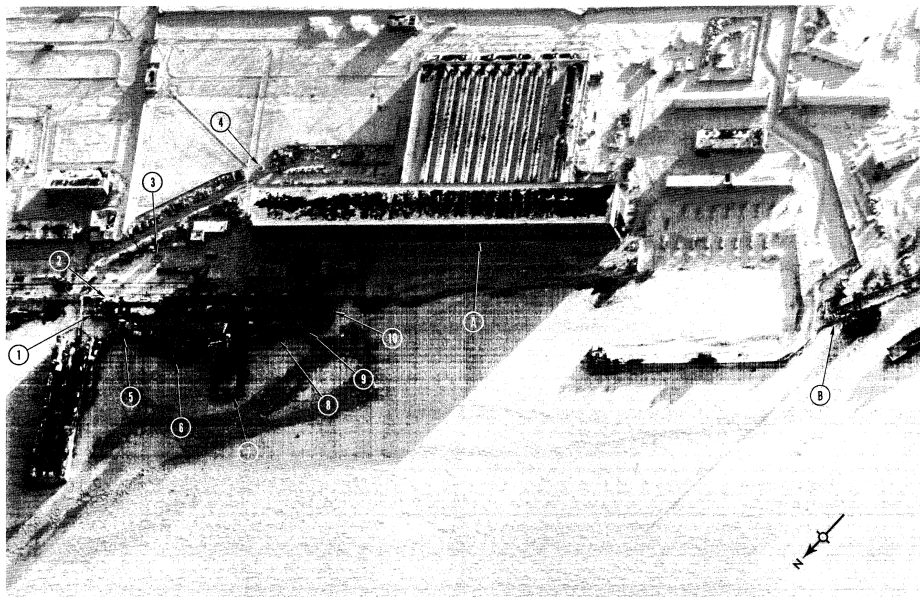


FIGURE 7. OUTFITTING QUAY, MAIN YARD, AND CONSTRUCTION HALL NO. 2 SHIPYARD 402, SEVERODVINSK, USSR, [redacted]



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IMAGERY ANALYSIS SERVICE

SHIPYARD : NAVAL BASE AND SHIPYARD 402
LOCATION : SEVERODVINEK, USSR
GEO COORDS: 64-35N 039-50E

KEY TO ANNOTATIONS ON FIGURE 8

1. Unidentified Cylindrical Object on Quay.
This object is approximately 50 feet in length by [redacted] in diameter and is resting in a cradle-like device. A solid convex "cap" is positioned across the transverse end of this object nearest the quay's edge.
Imagery probably equating to this object was visible but not reported on poor quality photography of [redacted]. It was not present [redacted] although the blocks upon which it is probably [redacted] This area of the West Basin Quay is presently separated from Construction Hull No. 2 and the shipyard proper by a high fence and an unbridged ditch.
2. Eight Probable Polish "TR-10" Class MEB on Quay
[redacted]
3. Two Probable "R-6" Class TT Bolls (LOA of each approximately 35 feet). It is not possible to determine if these craft are equipped with radar reflectors. [redacted]
4. Six Probable "NIRVAT-2" Class YDT on Quay (LOA of each approximately 70 feet)
[redacted]
5. Possible Floating Workshop (LOA approximately 215 feet)
[redacted]
6. Unoccupied Large Transporter Dock with Out-down Sidewalls at the Stern. Principal approximate dimensions for this dock are: overall length - 440 feet; inside length - 390 feet; inside width - 35 feet. A similar dock was last observed at the West Basin Pier Area in [redacted]. This is the second winter that a 440-foot transporter dock has been observed berthed in this area of the West Basin Quay - apparently awaiting the break-up of the ice on the canal system prior to its return to service. See Annotation 11. [redacted] (CIA/EEB-6311). For an assessment of [redacted] large transporter observed from Corby, see Annotation 1, Figure 2 of this report.
7. Unidentified Quad Craft (LOA approximately 13 feet)

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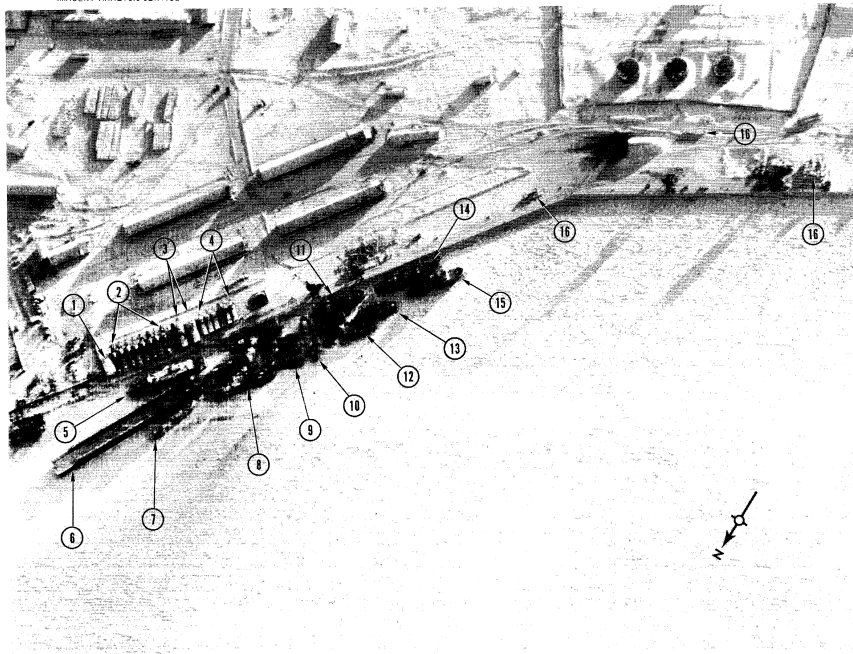
8. Possible "TOPLIVO-2" Class YO (LOA approximately 170 feet)
The three craft inboard of this ship cannot be identified. See Anno-
[redacted]
9. Three Probable "TOPLIVO-1" Class YOs (LOA of each roughly 100 feet)
Catwalks, superstructure placement aft, and relative size contribute
to this identification. [redacted]
10. Unidentified Two-Hatch Barge (LOA approximately 135 feet)
11. Unidentified Vessel (LOA [redacted])
12. Possible YTM (visible length approximately 125 feet)
13. Unidentified Auxiliary (LOA approximately 215 feet)
14. Unidentified Vessel (LOA approximately [redacted])
15. Probable OKHIVSKIY Class AIR (LOA approximately 150 feet)
[redacted]
16. Possible Fuel Storage Drums
A total of 37 such drums are visible at three areas on the quay.

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TOP SECRET

SHIPYARD : NAVAL BASE AND SHIPYARD 402
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

- KEY TO NUMBERED ANNOTATIONS ON FIGURE 9
1. Probable "J" Class SSG (visible waterline length roughly 275 feet)
A black depression in the after hull similar to the after deflector cavity on the "J" and a sail shadow similar to that of the "J" Class SSG observed at this pier in [redacted] contribute to this identification. [redacted]
By [redacted] a total of six "J" Class SSGs were accounted for as having arrived at Severodvinsk from Gorkiy [redacted] and the Annex to DDI/IAR-83044). Analysis of [redacted] coverage of the Gorkiy shipyard indicates that a large transporter dock containing a "T" Class [redacted] See DDI/IARs 83006 and 83007. The only transporter dock visible at Severodvinsk in [redacted] was berthed in the identical position at the West Basin Pier Area as the dock observed in [redacted] and was probably the same dock. This evidence indicates, therefore, that no "J" Class SSG had arrived at Severodvinsk between [redacted]
The only transporter dock visible at Severodvinsk on the present mission [redacted] is located along the West Basin Quay. This dock is in a different position and is believed to be a different dock from the one observed at Severodvinsk in [redacted] It probably is the dock which left Gorkiy between [redacted] and thus would represent the seventh "J" Class to have come from Gorkiy [redacted]
 2. "T-58" Hull (possibly the ASR version) - LOA roughly 230 feet
Hull outline, relative length, lifeboat placement, and the apparent lack of a gunmount forward contribute to this assessment. No "T-58" Class MSP or ASR have previously been identified at Severodvinsk on [redacted] photography.
 3. Probable Barge (LOA approximately 155 feet)
 4. Floating Crane (Approximate platform dimensions - [redacted]
This crane has not previously been observed at Shipyard 402.

25X1



5. Three Large Rectangular Platforms (approximately 175 by 45 feet). Two of these flat platforms appear to be devoid of significant top-side detail. One may have a low superstructure amidships. They appear to be too wide and too high out of the water to be pier sections. They could possibly serve as work barges. None of these platforms has previously been sighted at Severodvinsk.

25X1

6. Two Probable Catamaran-type YAGT (LOA of each approximately [redacted])

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7. Short Catamaran Target Barge (LOA approximately [redacted])

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8. Probable YAGT (LOA approximately [redacted])

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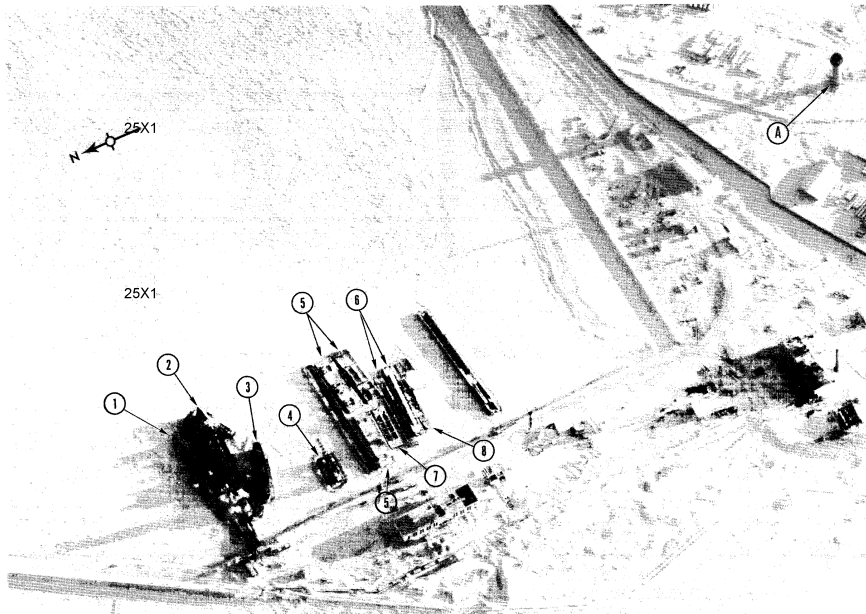
KEY TO FACILITY ANNOTATION ON FIGURE 9

- A. Probable Water Standpipe Under Construction
A circular foundation was all that was present on this site in [redacted]
[redacted] this structure had been constructed to a height of roughly 85 feet. Its present height is roughly 120 feet.

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FIGURE 9. PIER AREA, WEST BASIN, SHIPYARD 402, SEVERODVINSK, USSR.

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IMAGERY ANALYSIS SERVICE
SHIPYARD : NAVAL BASE AND SHIPYARD 402
LOCATION : SEVERODVINSK, USSR
GEO COORDS: 64-35N 039-50E

KEY TO ANNOTATIONS ON FIGURE 10

1. BUSSARD Class AKL (LOA approximately 320 feet)
Two unidentified craft are berthed against the BUSSARD's port side.
2. Two Floating Vertical Screens
Two unidentified small craft are between the screens and the quay. The outboard craft measures approximately 95 feet in length and the inboard craft measures approximately 80 feet in length.
3. Three Possible Pier Sections under Construction on Quay
Each of three rectangular sections measures approximately 120 by 40 feet. No superstructure is presently visible on any of the three objects which leads to their identification as pier sections rather than work barges. A rectangular work barge 130 feet in length has, however, previously been observed under construction on this quay. See Annotation 4.
4. Rectangular Submarine Support Barge (LOA approximately 190 feet)
This Gorkiy-built barge has arrived at Severodvinsk from Shipyard 112 since [redacted] a total of nine rectangular submarine support barges were present at Severodvinsk. In [redacted] a total of 10 such barges are present at Shipyard 402. In [redacted] a total of four 190-foot rectangular YRSNs were observed at Gorkiy Shipyard 112; and in [redacted] of the same year only three rectangular YRSNs were present, indicating a delivery of one rectangular YRSN from Gorkiy in the [redacted] See the note on page 5 of DDL/LAR-83027.
5. "G" Class SSB (visible waterline length approximately 320 feet)
The missile tube canopies across the top of the sail have either been removed or are open, thereby exposing the tops of the three missile tubes. The diameter of each tube cover is approximately [redacted] The leading and after edges of the sail appear to be scaffolded, and the after deck plating appears to be removed for a distance of 80 feet from the sail. Two floating vertical screens are outboard of the sail.
6. "A-11" Class SSB (visible waterline length approximately 315 feet)
The lack of cleavages (lens-shaped opening) across the completely intact sail housing provides the first identification of a "A-11" Class SSB to be sighted at Severodvinsk on [redacted] photography.

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[redacted] evidence through [redacted] indicates, that one "G" was converted between [redacted] and left the yard shortly thereafter; the second and third "G" Class arrived for conversion in the [redacted] and are still being worked on. The fourth "G" (the prototype "G-II") arrived for an unspecified rework between [redacted]

The above conclusion is based on the following observations:

- (a) The two "G" Class SSBs (Annotation 5 and 6) presently at this quay are berthed roughly 100 feet further east than the two possible "G" Class SSBs observed at this quay in [redacted]. The "G" Class SSB now in the Wet Basin (Annotation 10, Figure 11, of this report) is in a different position than the possible "G" Class SSB in the basin in [redacted]. Thus, this total of three "G" Class SSBs compares to the three possible "G" Class last observed at Severodvinsk in [redacted]
- (b) The "G-II" presently observed at the quay is believed to be either a new arrival (the prototype) or a recently modified "G" which could have left the Wet Basin. Based upon "G" Class sightings in the [redacted] it is felt that the first modified/overhauled "G" Class left Severodvinsk in the [redacted]. The "G-II" now seen with its sail intact in [redacted] is later seen [redacted] in this identical location with its sail torn down while a completed "G-II" is observed in an identical position as the "G" at Annotation 5 above. Based on this evidence it is believed that the outboard "G" at Annotation 5 above is a nearly complete "G-II" and the inboard "G-II" is the prototype "G-II" in for a major refit. The remaining "G" Class SSB undergoing conversion in the wet basin is later observed (in [redacted] in the identical position as it is now seen in [redacted]

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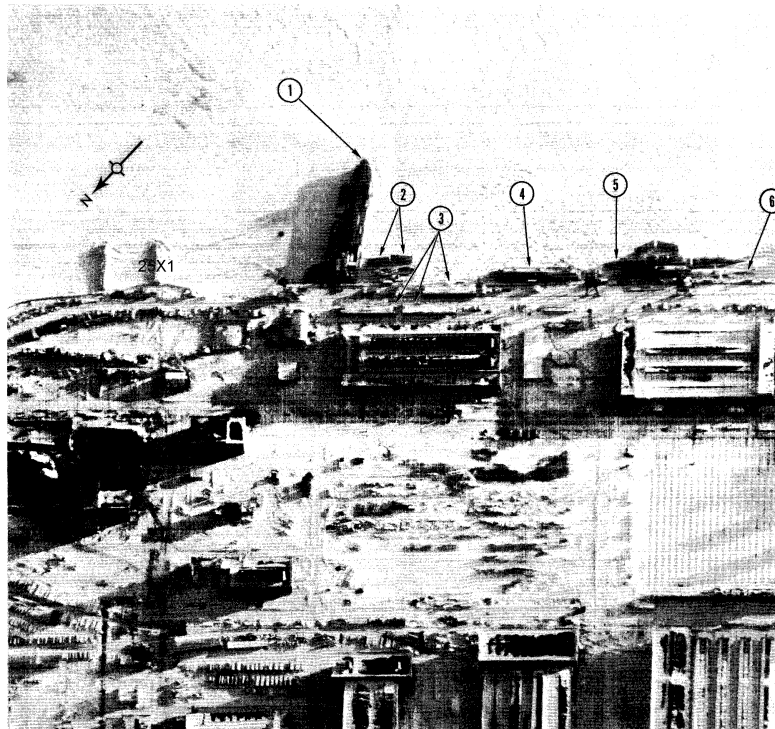
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FIGURE 10. MAIN QUAY, YAGRY ISLAND REPAIR FACILITY, SHIPYARD 402, SEVERODVINSK, USSR, [redacted]

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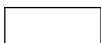
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however, the after edge of the sail is partially obscured by the shadow from the Wet Basin wall. These dimensions are more compatible with the "H-I" than the "H-II". Other than the observation of a peaked-roof weather shed approximately 115 feet from the stern of the submarine and an apparently intact sail, very little additional topside detail is discernible due to shadow.

25X1

A possible "G" Class SSB occupied this position within the Wet Basin [redacted] A large unidentified submarine, possibly equating to an "H-I" Class SSBN previously sighted in the estuary, was observed on [redacted] along the northern ledge of the Wet Basin [redacted]

25X1

10. "G" Class SSB (visible LOA approximately 315 feet)
The bow (end-point nearest the basin entrance) is obscured by shadow. A set of peaked-roof weather sheds covers the forward half of the sail. The after portion of the sail appears to be intact. No submarine was sighted in this position within the Wet Basin on [redacted] This submarine probably equates to one of the two possible "G" Class SSBNs observed against the Main Quay to the Yagry Island Repair Facility on [redacted]

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- 11 & 12. Rectangular Submarine Support Barge (visible length approximately 180 feet)
On [redacted] only one rectangular barge was located in the Wet Basin. [redacted]

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13. Probable "H" Class SSN (visible LOA roughly 355 feet)
A curved "staybrite" sonar belt similar to that on the bow of the "H" is visible as the end-point nearest the basin entrance to the estuary. The stern is hidden by the basin wall. A 360-foot "H" Class SSN (with barge outboard) is later observed in this identical position in [redacted] A peaked-roof shed is placed over the sail area on this [redacted] coverage. No other topside detail is visible.

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A submarine having a sail at least 80 feet long was observed along this ledge on [redacted]

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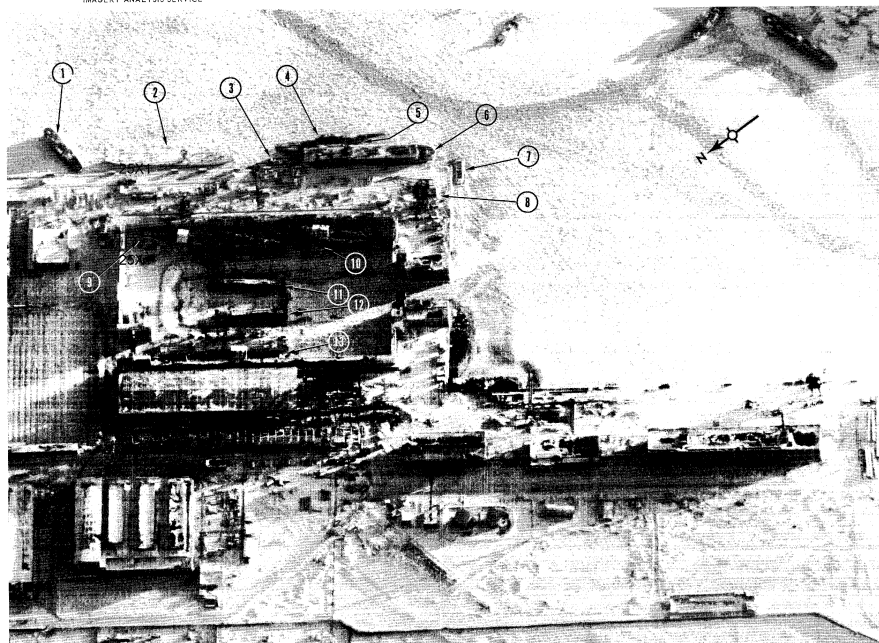


FIGURE 11. WET BASIN AND MAIN QUAY, YAGRY ISLAND REPAIR FACILITY, SHIPYARD 402, SEVERODVINSK, USSR.

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IMAGERY ANALYSIS SERVICE

SHIPYARD : NAVAL BASE AND SHIPYARD 402

LOCATION : SEVERODVINSK, USSR

GEO COORDS: 64-35N 039-50E

KEY TO ANNOTATIONS ON FIGURE 12

1. "TOPLIVO-2" Class YO (LOA approximately 170 feet)

2. RIGA Class DE

3. Small Barge (LOA roughly 70 feet)

4. RIGA Class DE

5. Probable RADCON/DECON Submarine Support Barge (visible LOA roughly 170 feet)

6. ZEYA Class YRSH
Poor contrast and shadow preclude interpretation of the lash-up between the ZEYA and the "M" Class SSN. See Annotation 8, Figure 1C,

7. "M" Class SSN (visible waterline length roughly 350 feet)
The hull plating and sail housing appear intact on this submarine. Should this submarine equate to one seen in at Severodvinsk the most likely candidate would be the "M" Class sighted near the entrance to the Wet Basin.

8. "H-II" Class SSBN (visible waterline length approximately
The distance between the visible bow end-point and the top leading edge of the sail measures roughly 75 feet. The length of the sail across the top measures approximately 80 feet. The best estimate of the length of the sail at the deckline is roughly 95 feet; however, the deckline sail extremities are difficult to delineate. All of the above dimensions, however, are more compatible with the "H-II" rather than the "H-I".

The hull plating and sail housing appear intact on this submarine.

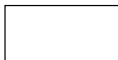
Should this submarine equate to one previously seen at Severodvinsk, the most likely candidate would be the large unidentified submarine observed on on the northern ledge of the Wet Basin. See

9. Probable RADCON/DECON Submarine Support Barge (LOA approximately 130 feet)

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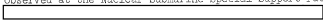
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NOTE: A possible "TOPLIVO-2" Class YO, a 70-foot yard craft, and a 140-foot two-hatch barge are located at a pier (not shown on Figure 12) to the east of the RIGA DB. The 140-foot barge was previously observed at the Nuclear Submarine Special Support Facility in

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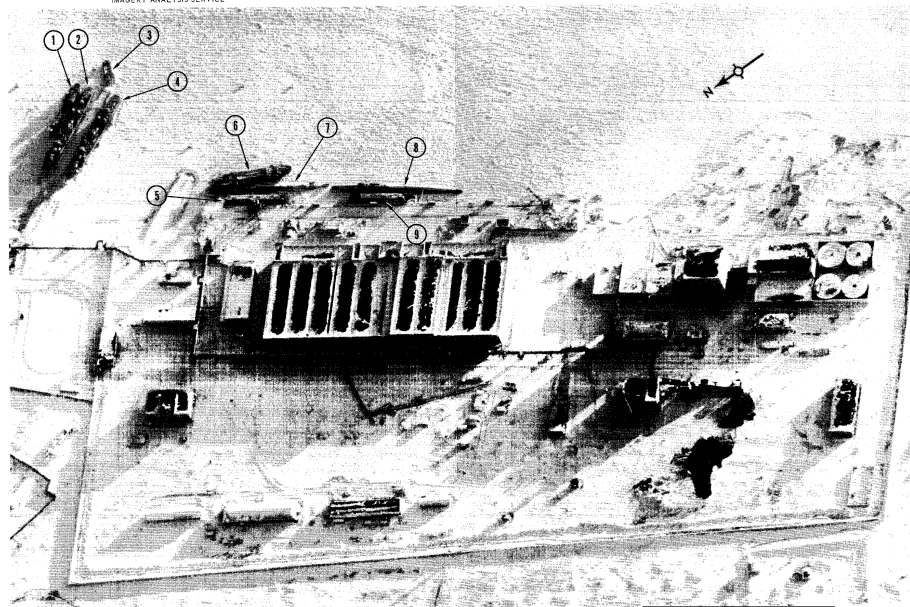


FIGURE 12. NUCLEAR SUBMARINE SPECIAL SUPPORT FACILITY, YAGRY ISLAND SHIPYARD 402, SEVERODVINSK, USSR

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2. CIA. DDI/TAR-83018, Severodvinsk Naval Base and Shipyard 402, Severodvinsk, USSR - Precision Plot, Functional Analysis and Berthing Space Delineation, August 1967 TOP SECRET [redacted]
3. CIA. PIR-67315, Naval Base and Shipyard 402, Severodvinsk, [redacted]
4. CIA. PIR-77130, Naval Base and Shipyard 402, Severodvinsk, [redacted]
5. CIA. PIR-67367, Severodvinsk Naval Base and Shipyard 402, Severodvinsk, USSR, [redacted]
6. CIA. DDI/TAR-83044, Naval Base and Shipyard 402, Severodvinsk, [redacted]
7. CIA. PIR-77008, Submarine Hull Sections, Severodvinsk Naval Base and Shipyard 402, Severodvinsk, USSR, [redacted]
8. CIA. PIR-67311, Naval Base and Shipyard 402, Severodvinsk, [redacted]
9. CIA. PIR-67310, Naval Base and Shipyard 402, Severodvinsk, [redacted]

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10. CIA. DDI/IAR-83006, Gorkiy Shipyard 112, Gorkiy, USSR,

[REDACTED]

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11. CIA. DDI/IAR-83007, Gorkiy Shipyard 112, Gorkiy, USSR,

[REDACTED]

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12. CIA. DDI/IAR-83027, Gorkiy Shipyard 112, Gorkiy, USSR,

[REDACTED]

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Requirement

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IAS Project

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10. CIA. DDI/IAR-83006, Gorkiy Shipyard 112, Gorkiy, USSR,

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11. CIA. DDI/IAR-83007, Gorkiy Shipyard 112, Gorkiy, USSR,

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12. CIA. DDI/IAR-83027, Gorkiy Shipyard 112, Gorkiy, USSR,

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Requirement

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